



Hammond Lake Kosciusko County FISH MANAGEMENT REPORT 2002



Department of Natural Resources

Division of Fish and Wildlife

BACKGROUND

Hammond Lake is a 5-acre natural lake located on Tri-County Fish and Wildlife Area at North Webster, Indiana. It lies within a large wetland complex in one branch of the headwaters of Lake Wawasee (Elkhart River watershed), separated by a deteriorating dam on the north end and an earthen levee on the south end. A boat launching area and parking lot are provided but outboard motor operation is prohibited.

The lake is 33 feet deep. The bottom is mostly muck. Water clarity is very good (9½ ft secchi) but oxygen levels are variable (Table 1). Daily changes can occur in the surface layer due to plant photosynthesis and respiration, but oxygen amounts below 15 feet are consistently low. Coontail is dense to a depth of 12 feet and spatterdock lines much of the shoreline area.

Fish management at Hammond Lake has focused mainly on largemouth bass. A 14-inch size limit was imposed in 1973. It was increased to 18 inches and the daily limit was reduced to two in 1997 when lakes on the Tri-County Area were included in a study designed to improve bass fishing. No specific sampling for the study was done at Hammond Lake, but a population survey was conducted on July 1-3, 2002. Sampling effort consisted of ¼ hour of electrofishing, four gill nets lifts and four trap net lifts.

SURVEY RESULTS

During the survey, 268 fish weighing 110 pounds were collected, similar to the average number of fish in previous surveys (Table 2). Fifteen species were noted. Golden shiners ranked first by number (31%), followed by brown bullheads (19%), black crappies (18%) and lake chubsuckers (13%). Bowfin accounted for most of the weight (56%). Altogether, sportfish made up only 44% of the number and 26% of the weight.

Table 1. *Oxygen levels (ppm) and water clarity (secchi depth) at Hammond Lake in 1969 to 2002.*

Depth (ft)	6/23/69	6/26/1985	6/1/93	7/2/2002
0	5.8	6.0	9.0	3.9
5	5.8	6.0	9.0	3.6
10	4.4	10.0	9.0	8.3
15	10.2	3.0	5.0	6.9
20	2.0	3.0	2.2	0.6
25	0.4	trace	0.4	0.4
30	0.0	trace	0.0	--
Secchi (ft)	12.4	12.0	11.3	9.5

Table 2. *Number of fish collected in fish population surveys at Hammond Lake from 1962 to 2002.*

Species	Number			Pounds	
	1962	1969	1985	1993	2002
Banded killifish	0	0	0	0	1
Black crappie	8	5	21	9	48
Bluegill	67	29	221	112	9
Bowfin	1	3	3	2	18
Brown bullhead	1	2	4	4	50
Central mudminnow	0	0	0	1	2
Golden shiner	0	77	34	2	83
Grass pickerel	1	1	1	2	6
Green sunfish	1	0	0	1	0
Hybrid sunfish	0	0	3	0	0
Lake chubsucker	4	42	6	15	36
Largemouth bass	11	3	18	40	6
Northern pike	0	0	2	4	0
Pirate perch	0	0	0	0	4
Pumpkinseed	13	8	43	5	0
Redear	91	1	12	17	1
Spotted gar	0	1	0	1	1
Warmouth	23	5	27	11	2
Yellow bullhead	15	10	12	0	1
TOTAL	236	187	407	226	268

Only nine bluegills, measuring 3-7½ inches long, and only six largemouth bass that were 2¼-11 inches long were caught during the survey. Brown bullheads were up to 15 inches long and crappies were 2¼-10½ inches. Other sportfish included two warmouth, an 8-inch redear, and a yellow bullhead. Most of the golden shiners and lake chubsuckers were 7-8 inches. The 18 bowfin were 19-23 inches long.

MANAGEMENT IMPLICATIONS

Hammond Lake is dominated by non-sportfish and provides little fishing opportunity due to poor habitat conditions. Daily and seasonal fluctuations in oxygen levels may at times suffocate fish and reduce their recruitment. Similar bog-like conditions are present at several small natural lake basins in the area. However, the cost to improve habitat by large-scale plant control, aeration or other means would probably not produce enough benefits. Therefore, no immediate management is recommended.

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